PCT/GB2004/004324

30

CLAIMS

- 1. A detergent body containing a high proportion of a solid component, wherein the detergent body is produced in an injection moulding process.
 - 2. A body according to claim 1, wherein the body comprises a binder.
- 10 3. A body according to claim 2, wherein the binder is present at 5-50 wt%, more preferably 5-40 wt% and most preferably 10-30 wt% (e.g. such as between 10-20 wt%) of the detergent body.
- 15 4. A body according to claim 3, wherein the binder comprises a thermoplastic material having a melting point of about 35°C.
- 5. A body according to claim 2, 3 or 4 wherein the 20 binder is PEG having a molecular mass of between 1500 to 35000.
- 6. A body according to anyone of claim 1 to 5, wherein the solid content of the detergent body is at least 50 wt%, more preferably at least 65 wt% and most preferably at least 80 wt%.
 - 7. A body according to claim 6, wherein the solid component comprises at least 50 wt% builders.
 - 8. A body according to claim 7, wherein the builder is an alkali metal citrate salt.
- 9. A body according to anyone of claims 1 to 8, wherein the detergent body formulation comprises a lubricant.
 - 10. A body according to claim 9, wherein the lubricant is present at 0.1 to 10 wt%.

PCT/GB2004/004324

30

- 11. A body according to anyone of claims 1 to 10 wherein the detergent body has a coating.
- 5 12. A body according to claim 11, wherein the coating comprises a water soluble/ water dispersible skin which at least partially encloses a detergent formulation.
- 13. A body according to anyone of claims 1 to 12, for use in an automatic washing process in an automatic washing machine.
 - 14. Process for producing a detergent body having a high proportion of a solid component, wherein the process comprises injection moulding.
- 15. A process, according to claim 14 comprising the following steps:
 - a) Feed the materials to the barrel (hopper) of an injection unit of an injection moulding machine.
- 20 b) Cause the added admixture to be progressed along the barrel of the injection moulding machine towards an injection nozzle.
- c) Inject the composition into a mould at a temperatureabove the plastification temperature of the binder.
 - d) Allow the composition to chill in the mould.
 - e) Open the mould and eject the shaped body therefrom.
 - 16. A process according to claim 15, wherein the body is coated with a coating material.

- 17. A process according to claim 15 or 16, wherein the body is packed with a packaging material.
- 18. A process according to claim 15, 16 or 17, wherein the component materials are blended before addition to the barrel.
- 19. A process according to claim 15, 16 or 17, wherein the binder and / or lubricant component(s) is/are partially / fully added to the admixture inside the barrel of the injection unit of the machine by additional feeding stations.
 - 20. A process according to anyone of claims 15 to 19, wherein in step (a) the component materials are added to the barrel at a temperature below the plastification of the binder system.
- 21. A process according to anyone of claims 15 to 19, wherein in step (a) the component materials are added to the barrel at a temperature above the plastification of the binder system.
- 22. A process according to anyone of claims 15 to 21, wherein in step (c) the pressure at the nozzle of the injection moulding machine while injecting is preferably less than 100 bar, more preferably less than 50 bar and most preferably less than 30 bar.
- 30 23. A process according to anyone of claims 15 to 22 for the preparation of multi-phase detergent bodies.
 - 24. A process according to claim 23, for the preparation of a body having a water soluble / water dispersible

outer skin which at least partially encloses a detergent formulation.

- 25. A process according to claim 23 or 24, wherein the process is performed using a machine which comprises a plurality of injection units with each injection unit able to process a different composition.
- 26. Use of a body according to any one of claims 1 to 12 in an automatic washing process in an automatic washing 10 (e.g. dishwashing) machine.